UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

MEMORANDUM

DATE: September 11, 2019

SUBJECT: **Ethoxyquin:** Report of the Cancer Assessment Review Committee

PC Code: 055501
Decision No.: 549718
Petition No.: N/A
Risk Assessment Type: Cancer Assessment
TXR No.: 0057940
MRID No.: N/A

DP Barcode: D454127
Registration No.: N/A
Regulatory Action: N/A
Case No.: N/A
CAS No.: 91-53-2
40 CFR: N/A

FROM: Melinda Wilson, Executive Secretary
Cancer Assessment Review Committee
Health Effects Division (7509P)

THROUGH: Gregory Akerman, Co-Chair
Cancer Assessment Review Committee
Health Effects Division (7509P)

Anwar Dunbar, Co-Chair
Cancer Assessment Review Committee
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TO: Austin Wray, Toxicologist
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The ethoxyquin toxicity database contains limited information to evaluate carcinogenic potential and, notably, lacks guideline rodent chronic/carcinogenicity studies. In the 2004 RED (D. Hrdy *et al*., D297736, 7/02/2004), the cancer risk for ethoxyquin was estimated using a theoretical Q_1* derived from a Q_1* predictor regression model and maximum tolerated dose (MTD) data for known carcinogens. This approach to estimate cancer risk in the absence of guideline carcinogenicity studies is not consistent with current practice. Accordingly, the requirement for the chronic/carcinogenicity toxicity study was re-evaluated by the Hazard Science and Policy Council (HASPOC), and Cancer Assessment Review Committee (CARC), respectively.

The HASPOC determined that guideline chronic/carcinogenicity studies would not contribute information that would impact the risk assessment and recommended waiving the requirement for these studies based on a weight of evidence evaluation of the expected limited exposure, results from the other guideline toxicity studies and information from the open literature that suggests ethoxyquin is not carcinogenic at doses that are relevant for risk assessment. The HASPOC recommendation and the data that informed the council's decision is covered in more detail in the ethoxyquin HASPOC memo (R. Louden, TXR 0057916, 9/06/2019).

The CARC Chairs considered the information supporting the HASPOC decision to determine the appropriate cancer classification for ethoxyquin. The available mutagenicity and carcinogenicity data do not indicate that ethoxyquin is a mutagenic or carcinogenic concern at doses relevant for risk assessment; however, the negative data are not sufficiently robust enough for the descriptor "Not Likely to be Carcinogenic to Humans". Therefore, in accordance with the EPA's *Final Guidelines for Carcinogen Risk Assessment* (March 2005), the CARC Chairs classified ethoxyquin as "Inadequate Information to Assess Carcinogenic Potential". Based on the available data, a non-linear approach (i.e., RfD) will adequately account for all the chronic toxicity, including carcinogenicity, that could result from exposure to ethoxyquin.